

Patent
Attorney Docket No.: P10-1439

REMARKS

Applicant thanks the Examiner for taking the time to conduct a telephone interview regarding the examination of the above-captioned patent application. The issues discussed during the telephone interview are fully provided in the following Remarks.

Rejections under 35 U.S.C § 103(a)

Claims 1-6 and 13-30 stand rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,968,295 of Kohno, *et al.* Kohno discloses a tire comprising a circumferential belt layer in addition to a slant belt layer in which specified PET, nylon, PEN or vinyl fiber cords or steel cords are used in the circumferential belt layer. (Kohno, Abstract).

Applicant has amended independent claim 1, which claims a tire comprising, *inter alia*, a crown having a reinforcing ply, a first crown reinforcement "being high elastic modulus at 4 % strain organic fiber cords" and a second crown reinforcement having a ratio τ inferior to 1.5 and further characterized as "being low elastic modulus at 4 % strain cords." (Amended Claim 1).

To establish a *prima facie* case of obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 985 (CCPA 1974). All words in a claim must be considered in judging the patentability of that claim against the prior art. *In re Wilson*, 424 F.2d 1382, 1385 (CCPA 1970).

Additionally, to render a later invention unpatentable for obviousness, the prior art must enable a person of ordinary skill in the field to make and use the later invention. *In re Kumar*, 418 F.3d 1361, 1368 (Fed. Cir. 2005). As the Federal Circuit explains:

An applicant may rebut a *prima facie* case of obviousness by providing a "showing of facts supporting the opposite conclusion." Such a showing dissipates the *prima facie* holding and requires the examiner to "consider all of the evidence anew." Rebuttal evidence may show, for example, that the claimed invention achieved unexpected results relative to the prior art; that the prior art teaches away from the claimed invention; that objective evidence (e.g., commercial success) supports the conclusion that the invention would not have been obvious to a skilled artisan; or that the prior art did not

Patent
Attorney Docket No.: P10-1439

enable one skilled in the art to produce the now-claimed invention.

In re Kumar at 1368, [Citations deleted, emphasis added].

Furthermore, the courts have explained in the case *Application of Payne*, 606 F.2d 303, 314 (CCPA 1979):

References relied upon to support a rejection under 35 U.S.C. 103 must provide an enabling disclosure, i.e., they must place the claimed invention in possession of the public.

Id. at 314.

Applicant respectfully asserts that a *prima facie* case of obviousness has not been presented because the cited prior art fails to teach or suggest each and every limitation found in the amended claim 1 under examination. Furthermore, Applicant respectfully asserts that the cited prior art references (1) fail to enable one skilled in the art to produce the now-claimed invention or (2) that the cited prior art places the claimed invention in possession of the public.

The Examiner states in the Final Office Action, on pages 3-4:

Kohno teaches that the layer or reinforcement 7, which is made up of layers 7-1 and 7-2, may be made from cords comprising PET fibers or PEN fibers, nylon and steel, among other materials. Applicants' note this teaching, but note that Kohno does not specifically state that the two layers 7-1 and 7-2 may be made from different materials from the group disclosed. This appears to be true because Kohno states that the layer 7 may be made from the materials, but never states that the separate layers 7-1 and 7-2 are made from different materials.

Applicants then argue that claim 1 is allowable over Kohno due to this lack of specifics in the materials of the individual layers 7-1, 7-2, because claim 1 recites that the two crown reinforcements are made from different materials.

This is not found persuasive because a careful review of claim 1 reveals that the first crown reinforcement is a high elastic modulus organic fiber but nowhere is the material for the second crown reinforcement set forth. Claim 1 does not limit the first and second crown reinforcements to being made from different materials.

Patent
Attorney Docket No.: P10-1439

Applicant has amended claim 1 to claim that the first crown reinforcement having cords being *high elastic modulus at 4 % strain* and that the second crown reinforcement being *low elastic modulus at 4 % strain* cords. This claim amendment clearly indicates that the materials of the first and second crown reinforcements are made of materials **having different physical properties**.

The Examiner stated in the Advisory Action:

While the proposed amendment claims the first and second crown reinforcements as being either high or low modulus cords, the crown reinforcements are not positively recited as being made of different materials, which allows the possibility that different types of the same material could be used.

Applicant respectfully traverses the Examiner's statement because it is not **different materials** that are claimed by Applicant but **different material properties** that are claimed, whatever materials are used. The "same material" may have different properties when the phrase "same material" is taken in its most literal sense. Therefore, graphite and diamonds are of the "same material" because they are both carbon material. However, those having ordinary skill in the art would not think that diamonds and graphite are the "same material" because of their highly differing physical properties.

Kohno discloses that only the **same materials** are used for the two reinforcements. Significantly, Kohno fails to provide any teaching or suggestion that the "same material" may have **different physical properties**.

Indeed, as Applicant claims, the first crown reinforcement must be an organic cord having *high elastic modulus at 4 % strain* while the second crown reinforcement must have *low elastic modulus at 4 % strain* cords. The physical properties of the crown reinforcement materials are clearly claimed by Applicant and there is **no teaching or suggestion** by Kohno that the physical properties of the reinforcements disclosed by Kohno should be characterized as having different physical properties.

It is the claimed physical properties of the crown reinforcements that fully describe the invention of Applicant. There is no teaching or suggestion by the Kohno that the disclosed physical properties of the two reinforcements described therein be characterized as other than having the **same physical properties**.

Patent
Attorney Docket No.: P10-1439

As noted above, a *prima facie* case of obviousness requires that each and every limitation of the claimed invention be taught or suggested by the cited prior art references. Kohno fails to teach or suggest that the crown reinforcements be made of different materials or that the crown reinforcements be made of the same materials having differing physical properties. Kohno fails to teach or suggest that one of the crown reinforcements be made of cords having high elastic modulus and that the other crown reinforcement be made of cords having low elastic modulus. Nor does Kohno teach or suggest that the second crown reinforcement have a ratio “ τ of the tensile strength at a strain of 2.5 % and a temperature of 180 °C to the tensile strength at a strain of 1 % at 80 °C inferior to 1.5.”

Because Kohno fails to teach or suggest each of the limitations of the claimed invention under examination, Applicant respectfully requests reconsideration and withdrawal of the rejection of independent claim 1 as well as for claims 2-6 and 13-30 that depend therefrom.

Additionally, as noted above, Applicant asserts that the Kohno (1) fails to enable one skilled in the art to produce the now-claimed invention or (2) that the cited prior art places the claimed invention in possession of the public. As noted above, the courts require that the cited prior art references must enable one skilled in the art to produce the now-claimed invention and that the cited prior art must place the claimed invention in the possession of the public.

Since the cited prior art is silent as to the physical characteristics of the materials used to make the two crown reinforcements, the claimed invention under examination is not placed in the possession of the public. Neither is there any description of the tire that would result from having crown reinforcements as claimed by Applicant.

Such is true even if the current amendment is not entered. Even without the current amendment, the claimed invention requires that the first crown reinforcement be “high elastic modulus at 4 % strain organic fiber cords” and that the second crown reinforcement be characterized as having a “ratio τ of the tensile strength at a strain of 2.5 % and a temperature of 180 °C to the tensile strength at a strain of 1 % at 80 °C inferior to 1.5.” There is no teaching or suggestion provided by Kohno that the disclosed reinforcements be made of material having such physical characteristics. Without such teaching or suggestion, there is

Patent
Attorney Docket No.: P10-1439

no enablement of the Applicant's claimed invention in the Kohno nor does Kohno place Applicant's claimed invention in the possession of the public.

Significantly, Applicant asserts that one having ordinary skill in the art, without the use of Applicant's specification as a blue print, would be unable to read Kohno and then produce Applicant's claimed invention. Therefore, Kohno does not place Applicant's claimed invention in the possession of the public.

Therefore, Applicant respectfully requests reconsideration and withdrawal of the rejection of independent claim 1 as well as for claims 2-6 and 13-30 that depend therefrom.

Applicant asserts that all claims are now in condition for allowance and requests the timely issuance of the Notice of Allowance. If the Examiner believes that a telephone interview would expedite the examination of this pending patent application, the Examiner is invited to telephone the below signed attorney at the convenience of the Examiner. In the event there are any fees or charges associated with the filing of these documents, the Commissioner is authorized to charge Deposit Account No. 13-3085 for any necessary amount.

Respectfully submitted,

MICHELIN NORTH AMERICA, INC.



Frank J. Campigotto
Attorney for Applicant
Registration No. 48,130
864-422-4648